

REMARKS

This amendment is filed in response to the Office Action dated July 20, 2007 and advisory action of December 28, 2007. Claim 6 is amended and claim 12 is added. Claims 6 – 7 and 9 - 12 are in the case; claim 11 stands withdrawn from consideration.

Applicants respectfully traverse the rejection of claims 6 – 7 and 9 – 10 under 35 U.S.C. §103(a) as being unpatentable over Rusch (WO 93/04585) in view of Wichert et al. (WO 02/19823) ("Wichert").

More specifically, the teaching of Rusch is limited to the combination of certain alkyl substituted phosphonates and phosphinates with specific sugar beet herbicides. However, Rusch does not contain any specific or unambiguous teaching that phosphonates and phosphinates are capable of improving the efficacy of 2-(substituted benzoyl)-1,3- cyclohexanedione compounds as specified by the present claims (for example mesotrione), which compounds are suitable for use to control weeds in corn. In fact, it has been reported that sugar beet is sensitive to mesotrione treatment (see, e.g., Maeghe, L et al, "Soil activity and persistence of sulcotrione and mesotrione" Communications in Agricultural and Applied Biological Sciences (2004), 69(3), 41-48.). Accordingly, those skilled in the art would have no reasonable expectation of success in the modification of Rusch that has been suggested by the Examiner.

In the advisory action - the Examiner indicates that the Rusch teaching is not limited to sugar beet but contemplates other crops. In fact, Rusch only envisages certain other crops, particularly beets (page 2, line 15). Rusch does not specifically mention corn.

Applicants note that the chemical abstract CAN 90:163225 (Residual effect of sugar beet weed killers on sunflower, maize, tomato, soya and sorghum crops sown 30 days after treatment. Covarelli, Gino. Ist. Agron. Gen. Coltiv. Erbacee, Univ. Perugia, Perugia, Italy. Rivista di Agronomia (1978), 12(3), 129-35.) discloses that:

"Metamitron [41394-05-2] and ethofumesate-lenacil mixt. [51279-91-5], applied to sugar beet at com. doses, showed residual phytotoxicity to sunflower, corn, tomato, soybean, and sorghum planted 31-4 days after the treatment. Pyrazon [1698-60-8] was not phytotoxic to corn and sorghum, but damaged the other crops."

As the the English abstract indicates that metamitron and a ethofumesate-lenacil mix (which are specifically mentioned in Rusch) cause phytotoxicity in corn, this reference therefore suggest that

the one of ordinary skill would not consider the teachings of Rusch with regard to a herbicidal composition for controlling weeds in maize.

Once again, recognizing the deficiencies of Rush, the Examiner cites Wichert. However, Wichert does not remedy the deficiencies of Rush. Specifically, Wichert discloses that the mesotrione formulations referred to may optionally further comprise other additives, for example phosphate buffers to control pH. The fact that the use of a phosphate buffer is purely optional is supported by the examples provided in Wichert, none of which recite the use of a phosphate buffer. Thus, it can be seen that the purpose for the optional inclusion of phosphates in the herbicidal compositions taught by Wichert is simply to act as a pH buffer. Accordingly, one of ordinary skill in the art would not have any reasonable expectation that the modification of Rush as suggested by the Examiner (i.e., replacement of the specific sugar beet herbicides of Rush with the mesotrione herbicide of Wichert) would result in a beneficial and synergistic herbicidal composition.

Moreover, as noted above, component (ii) of the presently amended claims is now directed to organic phosphonate or phosphinate adjuvants at specified concentrations. Wichert is not germane to such adjuvants and would not instruct those skilled in the art to make the modifications to Rush that are suggested by the Examiner.

Finally, Applicants again respectfully submit that in reaching a conclusion of obviousness, the Patent and Trademark Office also must consider the "invention as a whole," which includes evidence of the invention's unexpected results. See In re Margolis, 228 USPQ 940 (Fed. Cir. 1986). More specifically, the data on pages 11 – 12 of the specification establishes that the combination in accordance with the present invention exhibits superior herbicidal effect. It is therefore respectfully submitted that the only motivation for modifying the teachings of Rush in view of Wichert to arrive at the claimed compositions and methods can only be accomplished by improper reliance on Applicants' disclosure. This data is particularly relevant to the (bis(2-ethylhexyl)-2-ethylhexylphosphonate) of claim 12. Accordingly, reconsideration and withdrawal of the § 103 rejection of claims 6 – 7 and 9 – 10 and 12 are earnestly requested.

Applicants note that the claims 6 – 7 and 9 – 10 have been provisionally rejected on the ground of obviousness-type double patenting as being unpatentable over the claims of copending applications 11/000,700 and 10/517,872, respectively. Applicants respectfully traverse the

Appl No. 10/517,873
Response Dated Tuesday, January 22, 2008
Reply to the Office action of July 20, 2007 and December 28, 2007 Advisory

Examiner's contention, but will consider the filing of a terminal disclaimer once allowable subject matter has been identified by the Examiner.

With the amendment and explanations presented herein, the Examiner is respectfully requested to reconsider the rejection of the claims and issue a Notice of Allowance. Applicants invite the Examiner to telephone the undersigned attorney of record if the Examiner feels such a call would advance the prosecution of the above-identified application.

Respectfully submitted,

USPTO Customer No. 26748
Syngenta Crop Protection, Inc.
Patent and Trademark Dept.
410 Swing Road
Greensboro, NC 27409
(336) 632-7706

/William A. Teoli, Jr./
William A. Teoli, Jr.
Attorney for Applicants
Reg. No. 33,104

Date: Tuesday, January 22, 2008